



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,775	02/17/2000	Kenji Oi	1076.1053/JDH	6984

21171 7590 11/19/2003

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

LEE, TIMOTHY L

ART UNIT	PAPER NUMBER
	2662

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/505,775	OI ET AL.
	Examiner	Art Unit
	Timothy Lee	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 August 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 9 and 19-22 is/are allowed.
- 6) Claim(s) 1-8,10-17,23,24 is/are rejected.
- 7) Claim(s) 18 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 10, ~~11~~, 12, 13, 16, and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Perlman (US 5,398,242).

3. Regarding claims 1, 2, 10, ~~11~~, 13, 16, 23, and 24, Perlman discloses a method and apparatus for automatically configuring LAN numbers to LANs in a network comprised of LANs and bridges connected to the LANs. When an end system, which is denoted by a triangle in Fig. 1, would like to communicate with another end system, it sends an explorer messages to determine the route a message should take. The end systems, bridges, and LANs can all be considered “nodes.” See col. 6, lines 24-62. As shown in Fig. 10C, when an end system on a LAN attempts to find a route to another end system, it generates 420 an all-paths explorer packet and transmits it onto the LAN. The explorer packet is then sent to bridge, where before any action on the packet is taken, the bridge verifies that the message was in fact originated on the LAN from which it was received (transferring a write packet from the first node to the second node). The bridge does this by determining whether the route field of the message is empty (the write packet comprises a blank portion). After verifying that that the received message has an empty route field, the bridges convert 422 the message to a special explorer broadcast message and forwards this message throughout the network (storing data addressed to the third node in

the write packet at the second node). One or more copies of the explorer broadcast packet message is forwarded to each LAN in the network (transferring the write packet from the second node to the third node). See col. 22, lines 11-61. As shown in Fig. 1, the network is not necessarily connected in a ring form (not connected in a ring form), and depending one looks at the connections, it could be looked at as in a star form (in a star form).

4. Regarding claim 10 more specifically, as mentioned previously, the bridge must determine if the route field of the message is empty, so it is inherent that circuitry exists to see if that portion of the packet is blank (an identification circuit identifying whether the data portion of the packet is blank).

5. Regarding claim 12 more specifically, looking at Fig. 1, L5 can be denoted the first node, L7 the second node, and L9 the third node. Communications from L5 to L7 can be considered downstream and communications from L9 to L5 can be considered upstream. The only difference in this claim from the previous claims is that the second node now refers to the first node from before and vice versa.

6. Regarding claims 3, 13, and 16, as mentioned previously, one or more copies of the explorer broadcast message is forwarded to each LAN, so a plurality of packets are sent to a plurality of nodes.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman and in light of the rejection to claim 1.

9. Regarding claims 4, 14, and 17, to send a message from a transmitting end system to a receiving end system, a header is attached to a message (packet includes a header and a data portion). See col. 4, lines 3-10. Perlman does not expressly disclose a packet where the data portion has identification information indicating whether the data portion is blank. It is well-known in the art that flags can be used to designate whether information exists in the packet, so it would have been obvious to put a flag in the packet to indicate whether the packet was blank. One would have been motivated to do this because instead of needing to scan the whole packet to determine if it was truly empty, the bridge would only have to see if the flag was in a set position to see what state the packet was in.

10. Regarding claims 5 and 15, Perlman does not expressly disclose using a guide packet which can be written on to denote that the write packet has been written too. It is well-known in the art that acknowledgment packets can be written on to confirm that an action has taken place, i.e. that a packet has been received without errors. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the concept of the acknowledgement packet in the system disclosed by Perlman to act as a “guide packet.” One would have been motivated to do this because sometimes the first node would like to know if the writing step occurred so it knows whether to retransmit if an error had occurred.

11. Regarding claim 6, data packets are sent all the time in the interconnected LANs disclosed by Perlman. Various nodes will process the data depending on when and where it

arrives. Whether or not these data packets are processed before or after the explorer packets is not expressly disclosed by Perlman. However, it would have been obvious that in the timing of the receipt of these packets that there exists a scenario where the write packets are transferred before the data packets are transferred. One would have been motivated to allow this to occur as not to prohibit the flow of data packets in the system.

12. Regarding claim 7, Perlman does not expressly disclose sending the explorer packets at predefined time intervals, but it would have been obvious to do so. One would have been motivated to do this because then the system would be able to update on regular intervals to discover more optimal paths to certain nodes.

13. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman in view of Ching et al.. Perlman does not expressly disclose padding the packets until they are to a fixed size. Ching et al. discloses padding to build a packet to 64 bits of data to make the data packet fixed size. It would have been obvious to a person of ordinary skill in the art at the time of the invention to pad the packets until they were filled to capacity. One of ordinary skill in the art would have been motivated to do this because sending packets of a fixed length reduces the complexity of having to determine when a variable length packet ends.

Allowable Subject Matter

14. Claims 9 and 19-22 are allowed.

15. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703)305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Application/Control Number: 09/505,775
Art Unit: 2662

Page 7



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600